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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,362	03/08/2007	Peter Cawley	OSS-001	4018

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Pierce Atwood LLP
160 Federal Street
10th Floor
Boston, MA 02110

EXAMINER

TOWA, RENE T

ART UNIT	PAPER NUMBER
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3736

NOTIFICATION DATE	DELIVERY MODE
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11/08/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/561,362	Applicant(s) CAWLEY ET AL.	
	Examiner RENE TOWA	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16, 18-20 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 18-20 and 24-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/26/10</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office action is responsive to an amendment filed October 18, 2010. Claims 16, 18-20 & 24-31 are pending. Claims 1-15, 17, 21-23 & 32-34 have been cancelled. Claims 16, 18-20 & 24-31 have been amended.

Drawings

2. The objections are withdrawn due to amendments.

Claim Objections

3. The objections are withdrawn due to amendments.

Double Patenting

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claims 29 & 32-31 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention verbatim as that of claims 22-25, respectively, of copending Application No. 12/393,931. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. **Claims 16, 18-20 & 25-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. (US 5,392,779) in view of Maniglia et al. (US 6,161,046).

In regards to **claim 16**, Meredith et al. disclose a system for testing an implant 3 attached to a bone, the system comprising:

a member 1 adapted to be releasably attached to said implant 3, and,
detecting means (5, 6) for detecting at least one resonance frequency of the member 1 when it is attached to the implant 3,

wherein said member 1 comprises a detectable part (i.e. body of member 1) and said detecting means comprises a detector 6 for detection of said detectable part (i.e. body of member 1) (see fig. 1; col. 1, lines 38-45; col. 2, lines 19-24 & 51-58).

In regards to **claim 19**, Meredith et al. disclose a system further comprising an amplifier 8, a processor 9, and a data storing arrangement 9a (see col. 3, lines 1-8).

In regards to **claim 20**, Meredith et al. disclose a system wherein signals detected by the detector 6 are amplified by said amplifier 8 and applied as an input to be analyzed; the analyzed output, which represents a ratio of a response voltage to the excitation, is fed to said processor 9, which varies the frequency output of the oscillator of the analyzer 7, and stores the results in said data storing arrangement 9a (see col. 2, lines 59-68; col. 3, lines 1-8).

In regards to **claim 26**, Meredith et al. disclose a system wherein the member 1 comprises a cantilever beam (see col. 1, lines 53-63; col. 2, lines 51-55).

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In regards to **claim 27**, Meredith et al. disclose a system wherein the beam is arranged or adapted to resonate at a frequency within the range of about 1 to 20 kHz (see col. 3, lines 63-68).

In regards to **claim 28**, Meredith et al. disclose a system wherein said member 1 is inherently disposable (i.e. the cantilever beam 1 can be thrown away whether intentionally or not, and is thus inherently disposable) (see fig. 1).

In regards to **claim 30**, Meredith et al. disclose a system wherein the beam is arranged or adapted to resonate at a frequency within the range of about 1 to 10 kHz (see col. 3, lines 63-68).

In regards to **claim 31**, Meredith et al. disclose a system wherein the beam is arranged or adapted to resonate at a frequency within the range of about 8 kHz (see fig. 2).

Meredith et al. disclose a system and equipment, as described above, that fails to explicitly teach a member comprising a magnetic part or a coil; or a detector comprising an electromagnetic part or a magnetic part.

However, **Maniglia et al.** teach that it is known to provide a disposable implant member 36' comprising a magnetic detectable part having a (titanium) coil releasably connected to a bone 24; and a probe portion comprising an electromagnetic detector 40' having a (driving) coil for contactless detection of said magnetic part (i.e. coil) (see fig. 4; col. 5, lines 45-49; col. 6, lines 8-10, 13-16 & 51-57).

In regards to **claims 16, 18-20 & 25-31**, Meredith et al. teach a system and equipment for measuring the vibrations of a cantilever beam member 1 connected to a

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bone via an implant to assess the degree of attachment of the implant to the bone (see fig. 1); since Maniglia et al. teach that it is known to determine the vibrations of a member 36' connected to a bone 24 in a contactless manner via a magnetic detectable coil, and a magnetic detector coil (see fig. 4; col. 6, lines 51-57), it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide the system and equipment of Meredith et al. with a magnetic detectable part comprising a coil and an electromagnetic detector comprising a coil as taught by Maniglia et al. in order to remotely monitor the vibration of the member so to assess the degree of attachment of the implant to the bone.

8. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Meredith et al. ('779) in view of Maniglia et al. ('046), and further in view of Mendes et al. (US 6,583,630).

Meredith et al. disclose a system, as described above, that fails to explicitly teach a detectable part consisting of a ferromagnetic material.

However, **Mendes et al.** teach that it is known to provide a member 150 attached to an implant (152, 154); wherein said member 150 includes a magnetic part and said detectable part consists of a ferromagnetic material (see fig. 12; col. 15, lines 8-26).

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide the system of Meredith et al. as modified by Maniglia et al. with a detectable part consisting of a ferromagnetic material as taught by Mendes et al. in order to remotely measure vibrations of the ferromagnetic material so as to assess the degree of attachment of the implant to the bone.

Response to Arguments

9. Applicant's arguments filed October 18, 2010 have been fully considered but they are not persuasive. Applicant contends that Maniglia fails to teach a disposable implant member comprising a magnetic part. This argument has been considered but has not been deemed persuasive.

In response to the Applicant's argument, the Examiner respectfully traverses. For example, Maniglia clearly teaches a titanium dish assembly 36' that is attached to a (malleus) bone 24 and includes a titanium coil, whose vibrations are detectable by a driving coil in assembly 40' (see fig. 4; col. 5, lines 45-49; col. 6, lines 8-10, 13-16 & 51-57). From a technical standpoint, similar to the Applicant's invention at fig. 1, Maniglia teaches a system wherein vibrations of the (malleus) bone 24 are transferred to the titanium dish assembly 36' and detected by the driving coil in assembly 40' in the arrangement shown in fig. 4 of Maniglia. As such, a difference between the Applicant's system and the system of Maniglia lies in the type of force that causes the vibrations in the bone. The Applicant's claim language clearly fails to make that distinction. In fact, the Applicant's claims pertain to measuring vibrations of a bone (i.e. any bone). Maniglia clearly teaches a system for measuring vibrations of the malleus bone 24 as shown in fig. 4 thereof. From a patentability standpoint, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. For example, Maniglia clearly teach a titanium dish assembly 36' is a magnetic part as

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admitted by Applicant at page 9 of 11 of the Remarks. Similarly, the dish 36' of Maniglia is inherently disposable whether intentionally or not since the dish 36' is fully capable of being thrown out or lost. For example, a billion dollar car, a trillion dollar dish, a billion trillion dollar jewelry or simply a cheap pen are all disposable whether intentionally or not. Moreover, the dish 36' of Maniglia may simply be replaced if or when it stops working (i.e. broken) according to specifications. As such, the specifications of Maniglia need not specifically spells out a characteristic, which is inherent therein.

In view of the foregoing, the rejections over at least one of Meredith et al., and Maniglia are maintained.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RENE TOWA whose telephone number is (571)272-8758. The examiner can normally be reached on Mon-Thurs, 8:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rene Towa/
Examiner, Art Unit 3736

/Max Hindenburg/
Supervisory Patent Examiner, Art Unit 3736